Application No. 09/590,284
Attorney Docket no. 018733-0967

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-38. (Canceled)

39. (Previously presented) A method for treating an autoimmune disorder, comprising administering to a subject having an autoimmune disorder a therapeutic composition comprising a pharmaceutically acceptable carrier and at least one antibody selected from the group consisting of an anti-CD22 antibody which targets an A, B, D, or E epitope of CD22, an anti-CD20 antibody, and an anti-CD19 antibody, wherein said at least one antibody is administered in an amount effective for inactivating or depleting B-cells in said subject.

40. (Previously presented) The method of claim 39, wherein said therapeutic composition is administered parenterally in a dosage of from 20 to 2000 mg per dose.

41. (Previously presented) The method of claim 40, wherein said subject receives said antibody in repeated parenteral dosages.

42. (Previously presented) The method of claim 39, wherein said antibody is selected from the group consisting of subhuman primate antibody, murine monoclonal antibody, chimeric antibody, humanized antibody, and human antibody.

43. (Previously presented) The method of claim 42, wherein said antibody is the murine, chimeric, or humanized LL2 antibody.

44. (Previously presented) The method of claim 39, wherein said therapeutic composition comprises at least two monoclonal antibodies that bind with distinct CD22 epitopes, wherein one of said at least two monoclonal antibodies binds with a CD22 epitope selected from the group considering of epitope A, epitope B, epitope D, and epitope E and a second antibody binds with a different CD22 epitope selected from the group consisting of epitope A, epitope B, epitope C, epitope D and epitope E.

45. (Previously presented) The method of claim 39, wherein said autoimmune disease is selected from the group consisting acute idiopathic thrombocytopenic purpura, chronic idiopathic thrombocytopenic purpura, dermatomyositis, Sydenham's chorea, myasthenia gravis, systemic lupus erythematosus, lupus nephritis, rheumatic fever, polyglandular syndromes, bullous pemphigoid, diabetes mellitus, Henoch-Schonlein purpura, post-streptococcal nephritis, erythema nodosum, Takayasu's arteritis, Addison's disease, rheumatoid arthritis, multiple sclerosis, sarcoidosis, ulcerative colitis, erythema multiforme, IgA nephropathy, polyarteritis nodosa, ankylosing spondylitis, Goodpasture's syndrome, thromboangitis ubiterans, Sjogren's syndrome, primary biliary cirrhosis, Hashimoto's thyroiditis, thyrotoxicosis, scleroderma, chronic active hepatitis, polymyositis/dermatomyositis, polychondritis, pamphigus vulgaris, Wegener's granulomatosis, membranous nephropathy, amyotrophic lateral sclerosis, tabes dorsalis, giant cell arteritis/polymyalgia, pernicious anemia, rapidly progressive glomerulonephritis and fibrosing alveolitis.

46. (Previously presented) The method of claim 39, further comprising separately administering a secondary therapeutic directed against T-cells, B-cells, plasma cells, or macrophages or inflammatory cytokines.

47. (Previously presented) The method of claim 46, wherein said secondary therapeutic is administered prior to the administration of said therapeutic composition.

48. (Previously presented) The method of claim 47, wherein said secondary therapeutic is administered concurrently with the administration of said therapeutic composition.

49. (Previously presented) The method of claim 48, wherein said secondary therapeutic is administered after the administration of said therapeutic composition.

50. (Previously presented) The method of claim 39, wherein said antibody is an anti-CD20 antibody.

51. (Previously presented) The method of claim 39, wherein said antibody is an anti-CD22 antibody.

52. (Previously presented) The method of claim 39, wherein said antibody is a naked antibody.

53. (Previously presented) The method of claim 52, wherein said antibody is a naked anti-CD22 antibody.

54. (Previously presented) The method of claim 39, further comprising administering a secondary therapeutic directed against T-cells, plasma cells, macrophages, or inflammatory cytokines wherein said secondary therapeutic is conjugated to an anti-B-cell antibody or is separately administered.

55. (Previously presented) The method of claim 39, further comprising administering a secondary therapeutic which is a conjugate of an anti-B-cell antibody with IL-2 or GM-CSF.

56. (Previously presented) The method of claim 54 or 55, wherein said conjugate is used in combination with a naked B-cell antibody.

57. (Previously presented) The method of claim 39, further comprising administering a secondary therapeutic directed against an inflammatory cytokine.

58. (Previously presented) The method of claim 57, wherein said secondary therapeutic is an anti-TNF or anti-IL-1 agent.

59. (Previously presented) The method of claim 39, comprising administering a naked anti-CD22, anti-CD19, anti-CD20, or anti-CD74 antibody in combination with a conjugate of an anti-CD22, anti-CD19, anti-CD20, or anti-CD74 antibody with a drug, toxin, enzyme, cytokine, hormone, boron compound or therapeutic radionuclide.

60. (Previously presented) The method of claim 59, wherein said naked antibody and said conjugated antibody are directed against the same antigen or epitope.

61. (Previously presented) The method of claim 59, wherein said naked antibody and said conjugated antibody are directed against different antigens or epitopes.

62. (Previously presented) The method of claim 59, wherein said conjugate is a drug conjugate in which the drug is one that acts against B-cells, plasma cells, or T-cells.

63. (Previously presented) The method of claim 59, wherein said conjugate is a drug conjugate in which the drug is one that acts against an inflammatory cytokine.

64. (Previously presented) The method of claim 59, wherein said conjugate comprises an enzyme.

65. (Previously presented) The method of claim 64, wherein said enzyme is an RNAse.

66. (Previously presented) The method of claim 39, wherein said therapeutic composition comprises a hybrid antibody which binds more than one B-cell antigen.

67. (Previously presented) The method of claim 66, wherein said therapeutic composition comprises a hybrid antibody which binds more than one epitope of the same B-cell antigen.

68. (Previously presented) The method of claim 39, wherein said therapeutic composition comprises a bispecific fusion protein, in which at least one arm targets a B-cell and a second arm targets a T-cell, plasma cell or macrophage antigen.

69. (Previously presented) The method of claim 39, comprising administering a conjugate of an anti-CD19, anti-CD20, anti-CD22 or anti-CD74 antibody with a drug, toxin, enzyme, cytokine, hormone, boron compound or therapeutic radionuclide.

70. (Previously presented) The method of claim 59, wherein said drug is selected from the group consisting of methotrexate, phenyl butyrate, bryostatin, cyclophosphamide, etoposide, bleomycin, doxorubicin, carmustine, vincristine, procarbazine, dexamethasone, leucovorin, prednisone, maytansinoids such as DM1, calicheamicin, rapamycin, leflunomide, FK506, immuran, fludarabine, azathiopine, mycophenolate, and cyclosporin.

71. (Previously presented) The method of claim 59, wherein said drug is selected from the group consisting of immuran, methotrexate, and fludarabine.

72. (Previously presented) The method of claim 39, wherein said antibody comprises an arm that is specific for a low-molecular weight hapten and wherein a low-molecular weight hapten with an attached therapeutic agent is administered after the antibody has bound to the B-cell antigen.

73. (Previously presented) The method of claim 72, wherein said hapten is a chelator

74. (Previously presented) The method of claim 60, wherein said conjugate is used in combination with a naked B-cell antibody.

75. (Previously presented) A method of treating multiple sclerosis, comprising administering to a subject with multiple sclerosis a therapeutic composition comprising a naked anti-CD20 antibody, a naked anti-CD22 antibody that binds with epitope B of the CD22 antigen, and a cytokine, wherein the two antibodies and the cytokine can be administered concurrently or in any order.

76. (Previously presented) A method according to claim 75, wherein the cytokine is IFN-ß.

77. (Previously presented) The method of claim 39, further comprising separately administering a drug to the subject in addition to the at least one antibody.

78. (Previously presented) The method of claim 77, wherein the drug is administered before, concurrently with, and/or after the administration of the at least one antibody.

79. (Previously presented) The method of claim 78, wherein the drug is selected from the group consisting of methotrexate, phenyl butyrate, bryostatin, cyclophosphamide, etoposide, bleomycin, doxorubicin, carmustine, vincristine, procarbazine, dexamethasone, leucovorin, prednisone, maytansinoids such as DM1, calicheamicin, rapamycin, leflunomide, FK506, immuran, fludarabine, azathiopine, mycophenolate, and cyclosporin.

80. (Previously presented) The method of claim 66, wherein said hybrid antibody which binds more than one B-cell antigen binds to at least two B-cell antigens selected from the group consisting of CD22, CD20, and CD19.

81 - 106. (Canceled)